

CLAIMS

1. A flame retardant composition which comprises (A) at least one compound selected from the group consisting of (A-1) a metal oxide represented by the formula M_xO_y (in the formula, M is at least one element selected from the elements of Groups 5, 8, 10 and 11 of the Periodic Table, and x and y are numerals satisfying $0 < x \leq 5$ and $0 < y \leq 5$, respectively) and (A-2) a trivalent phosphorus compound and (B) at least one phosphazene compound having a difference of 40-100°C between the temperature at which weight reduction is 50% by weight and the temperature at which the weight reduction is 5% by weight when it is heated from room temperature to 600°C at a heating rate of 10°C/min in an inert gas atmosphere according to TGA.
2. The flame retardant composition according to claim 1 which contains 0.1-60 parts by weight of the component (A) and 99.9-40 parts by weight of the component (B) in 100 parts by weight of the component (A) and the component (B) in total.
3. The flame retardant composition according to claim 1 or 2, wherein the component (B) has an acid value of not more than 1.0 and the component (B) has a water content of not more than 1000 ppm measured at 150°C according to Karl Fischer's method.
4. The flame retardant composition according to any one of claims 1-3, wherein the temperature at which the weight reduction of the component (B) is 50% by

weight is 320-460°C when it is heated from room temperature to 600°C at a heating rate of 10°C/min in an inert gas atmosphere according to TGA.

5. The flame retardant composition according to any one of claims 1-4, wherein the metal M in the component (A-1) is at least one metal selected from the group consisting of V, Nb, Fe, Ni, Pd, Pt, Cu, Ag and Au.
6. The flame retardant composition according to claims 1-4, wherein the component (A-1) is at least one compound selected from the group consisting of iron oxide, nickel oxide, palladium oxide and copper oxide.
7. The flame retardant composition according to any one of claims 1-6, wherein the temperature at which the weight reduction of the component (A-2) is 10% is 120-320°C when it is heated from room temperature to 600°C at a heating rate of 10°C/min in an inert gas atmosphere according to TGA.
8. The flame retardant composition according to any one of claims 1-6, wherein the component (A-2) is at least one of tertiary phosphines.
9. The flame retardant composition according to any one of claims 1-6, wherein the component (A-2) is at least one of triarylphosphines.
10. The flame retardant composition according to any one of claims 1-9 which further comprises (C) an aromatic resin.
11. The flame retardant composition according to

claim 10, wherein the component (C) is at least one resin selected from the group consisting of polyphenylene ether resins, polycarbonate resins, polyphenylene sulfide resins, phenolic resins, aromatic polyamide resins, polyester resins and thermotropic liquid crystals.

12. The flame retardant composition according to claim 10, wherein the component (C) is a polyphenylene ether resin.

13. The flame retardant composition according to any one of claims 10-12, wherein the weight ratio of the component (C) and the component (B) is $(C)/(B) = 95/5 - 5/95$.

14. A flame retardant resin composition which comprises the flame retardant composition described in any one of claims 10-13.

15. A flame retardant resin composition which contains (a) a resin and (b) the flame retardant composition described in any one of claims 1-13.

16. The flame retardant resin composition according to claim 15 which contains 1-1000 parts by weight of the component (b) based on 100 parts by weight of the component (a).

17. The flame retardant resin composition according to claims 15 or 16, wherein the component (a) comprises at least one thermoplastic resin selected from the group consisting of polycarbonate resins, polyphenylene ether resins, polyphenylene sulfide

resins, polypropylene resins, polyethylene resins, polystyrene resins, ABS resins, polyalkylene terephthalate resins, polyamide resins, thermotropic liquid crystals and elastomer-containing polystyrenes.

18. The flame retardant resin composition according to claim 15 or 16, wherein the component (a) is at least one resin selected from the group consisting of polyphenylene ether resins, polycarbonate resins, polystyrene resins, ABS resins and elastomer-containing polystyrenes, and the component (A-1) in the flame retardant composition which is the component (b) is iron oxide and/or copper oxide.

19. The flame retardant resin composition according to claim 15 or 16, wherein the component (a) is at least one resin selected from the group consisting of polyphenylene ether resins, polycarbonate resins, polystyrene resins, ABS resins and elastomer-containing polystyrenes, and the component (A-2) in the flame retardant composition which is the component (b) is at least one phosphine selected from triarylphosphines.

20. The flame retardant resin composition according to claim 15 or 16, wherein the component (a) comprises at least one hardening resin selected from the group consisting of unsaturated polyester resins, vinyl ester resins, diallyl phthalate resins, epoxy resins, cyanate resins, xylene resins, triazine resins, phenolic resins, urea resins, melamine resins,

benzoguanamine resins, urethane resins, ketone resins, alkyd resins, furan resins, oxetane resins, styrylpyridine resins and synthetic rubbers.

21. The flame retardant resin composition according to claim 15 or 16, wherein the component (a) is an epoxy resin, and the component (A-1) in the flame retardant composition which is the component (b) is at least one oxide selected from nickel oxide, palladium oxide, iron oxide and copper oxide.

22. The flame retardant resin composition according to claim 15 or 16, wherein the component (a) is an epoxy resin, and the component (A-2) in the flame retardant composition which is the component (b) is at least one phosphine selected from triarylphosphines.

23. The flame retardant resin composition which comprises (a) a resin and (b) the flame retardant composition described in claim 12, wherein the component (a) is an epoxy resin, and the component (C) in the flame retardant composition which is the component (b) is a polyphenylene ether resin having a number average molecular weight of 500-5000.

24. A molded article comprising the flame retardant resin composition according to any one of claims 14-23.